



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/864,965	05/24/2001	Edward J. Friery	14126	3462

7590

07/26/2005

Sally J. Brown
Autoliv ASP, Inc.
3350 Airport Road
Ogden, UT 84405

EXAMINER

LUK, EMMANUEL S

ART UNIT	PAPER NUMBER
----------	--------------

1722

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/864,965

Applicant(s)

FRIERY, EDWARD J.

Examiner

Emmanuel S. Luk

Art Unit

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-15,17-21 and 23-29 is/are pending in the application.
- 4a) Of the above claim(s) 24-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-15,17-21,23 and 29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-5, 7, 9-15, 17-19 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petty et al in view of Nolan (4519569) and Shimizu (5427520).

Nolan teaches an inner core (12) containing projections (Fig. 7) for forming a cap having where the projections form the line of weakness (52) that is adapted to snap over a shoulder on the bottle neck (Col. 2, lines 56-60) to form the tamper-indicating portion that is torn off from use. The projections being ramped in their shape.

Nolan fails to teach a pair of ramps and a boss.

Petty teaches an injection mold die having a window mold member (16) projecting from a surface (15) that defines a window, the window mold member is configured to separate the wall of the piece being molded from the surface when the

Art Unit: 1722

molded piece and mold are separated (Fig. 3a-3c), the core forms the U-shaped cut-out (17), the top of the window member being flat. An opening (14) is also formed on the product. Petty also teaches a mandrel (19) that functions as the inner core to form the molded product. The prongs of the U-shape are the 'ramps' in Petty can be considered parallel. The slope of the ramps from the surface to the top is a change in shape of the window mold member surface. It would have been obvious to one of ordinary skill in the art to modify Nolan with a pair of ramps as taught by Petty in forming a U-shaped projection on the inner core die.

In regards to the boss, Shimizu teaches the use of bosses (47; 48; 155; 156) as part of the mold release features (Col. 16, lines 31-39). It would have been obvious to one of ordinary skill in the art to modify Nolan with a boss as taught by Shimizu in providing release resistance to the mold movement. It would have been obvious to one of ordinary skill in the art to locate the boss between the ramps of the window mold member to form the opening.

In regards to the plurality of window mold members, this is merely duplicate parts with merely a multiplied effect of forming a plurality of windows simultaneously. It would have been obvious to one of ordinary skill in the art to modify Petty with a plurality of window mold members because it merely provides a multiplied effect. In re Harza, 124 USPQ 378 (CCPA 1960).

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nolan in view of Petty et al and Shimizu as applied to claims 1-5, 7-19 and 29 above, and further in view of Nakamura.

Nolan teaches the claimed apparatus as shown above. Nolan fails to teach metal molds.

Nakamura teaches an injection metal mold, wherein synthetic resin material is poured into a metal mold body in which a slide core different from a core of the metal mold body is projected to a lower edge portion of an article to be molded (Col. 1, lines 6-11).

It would have been obvious to one of ordinary skill in the art to modify Nolan with the mold materials to be made from metal as taught by Nakamura because it provides a strong material that will not deform during mold operations.

5. Claims 20, 21, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nolan in view of Petty et al and Shimizu.

Nolan teaches an inner core (12) containing projections (Fig. 7) for forming a cap having where the projections form the line of weakness (52) that is adapted to snap over a shoulder on the bottle neck (Col. 2, lines 56-60) to form the tamper-indicating portion that is torn off from use. The projections being ramped in their shape.

Nolan fails to teach a pair of ramps and a boss.

Petty teaches an injection mold die having a window mold member (16) projecting from a surface (15) that defines a window, the window mold member is

Art Unit: 1722

configured to separate the wall of the piece being molded from the surface when the molded piece and mold are separated (Fig. 3a-3c), the core forms the U-shaped cut-out (17), the top of the window member being flat. An opening (14) is also formed on the product. Petty also teaches a mandrel (19) that functions as the inner core to form the molded product. Additionally, It would have been obvious to one of ordinary skill in the art to realize the mold (15) that forms the side would have a front and a back. The prongs of the U-shape are the 'ramps' in Petty can be considered parallel. The slope of the ramps from the surface to the top is a change in shape of the window mold member surface. Additionally, the various shapes of the inner core member and the boss shape are merely a change in shape. It would have been obvious to one of ordinary skill in the art to modify Nolan with a pair of ramps as taught by Petty in forming a U-shaped projection on the inner core die.

In regards to the boss, Shimizu teaches the use of bosses (47; 48; 155; 156) as part of the mold release features (Col. 16, lines 31-39). It would have been obvious to one of ordinary skill in the art to modify Nolan with a boss as taught by Shimizu in providing release resistance to the mold movement. It would have been obvious to one of ordinary skill in the art to locate the boss between the ramps of the window mold member to form the opening.

In regards to the plurality of window mold members, this is merely duplicate parts with merely a multiplied effect of forming a plurality of windows simultaneously. It would have been obvious to one of ordinary skill in the art to modify Petty with a plurality of

window mold members because it merely provides a multiplied effect. In re Harza, 124 USPQ 378 (CCPA 1960).

Response to Arguments

6. Applicant's arguments with respect to claims 1-23 and 29 have been considered, however the arguments are not persuasive. The applicants argue that the Nolan reference only teaches a projection that forms a line of weakness and is not a window mold member, that the references do not teach a window mold member on the inner core die. In regards to the projection compared to a window mold member, this is an intended use of the mold member that the Applicant is trying to argue. It is known, and shown by the Nolan reference, in using a mold member that project from the inner die. That the projection merely causes a weakened line as opposed to a window is merely an intended use. The claimed invention merely pertains to a mold member projecting from an inner core die. In regards to the boss, Shimizu clearly teaches the uses of bosses in a molding apparatus and further, several of the bosses (155) is located on the sides of the mold member which are similar in relation to the motions experienced between an inner core die and an outer die and are thus analogous references.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel S. Luk whose telephone number is (571)

Art Unit: 1722

272-1134. The examiner can normally be reached on Monday-Thursday 8 to 5 and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Davis can be reached on (571) 272-1129. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EL


ROBERT DAVIS
PRIMARY EXAMINER
GROUP 1300/1200

7/25/05